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WASTE AND REFUSE COLLECTING CONTAINER

The invention relates to a waste and refuse collecting container (refuse container) with a
5 housing formed by four side walls which is essentially rectangular in horizontal section, in
particular square, with a base attached to the underside thereof and with a lid on the top of the
container which is pivotable about a horizontal axis.

The bottom of such refuse containers, intended for household refuse in particular, is
provided with a set of wheels to facilitate moving the filled container. To facilitate emptying the
10 filled container into refuse trucks, the upper side of the container has a slinging device which
enables mechanized lifting and tipping of the container around the refuse truck.

Normally, refuse containers come in standard sizes which can be used with the refuse
container holding and gripping means installed on the refuse truck. Because of this, there is in
practice little or no possibility of altering the dimensions of the fill volume of a standard refuse
15 container if the fill volume of a standard refuse container with a predetermined height and
predetermined section has to be or needs to be reduced, as desired and required by many local
authorities who intend to reduce the amount of refuse to be collected from individual households.

Changing the dimensions of a refuse container of predetermined size is also difficult on
ergonomic grounds as, for example, an undersized refuse container is difficult to load via an
20 opening which is too small and is difficult to move because it is not tall enough.

The aim of the invention is to provide a standard refuse container with means that reduce
its fill volume with respect to the fill volume given by the external dimensions in a simple
manner while retaining the external dimensions necessary for proper handling.

This aim is accomplished by dint of the container of the invention which is characterized
25 in that it has a second intermediate base which is spaced from the lower base, which restricts the
lower end of the container load space.

This produces a space beneath the intermediate base which reduces the fill volume of the container in the manner claimed while retaining its external dimensions.

Preferably, the lower edge of one of the side walls of the container ends in the region of the intermediate base, whereby an additional loading space is formed which is accessible from the side which, for example, can be used to accommodate recycling waste. To manufacture a container, which is usually manufactured by injection moulding, the same tools can be used as those for the original standard container, with the only additional requirement of inserting a former from the side into the lower region of the container. Such a container can thus be manufactured as a one-piece injection moulding.

In order to render the stowage space beneath the intermediate base more useful, in a further innovation, at least one removable drawer is arranged in the space beneath the intermediate base, which drawer is preferably guided by appropriate guide elements.

The fill volume of a prior art refuse container can be reduced by inserting into the housing an insert which is supported on the lower base, which insert has a plate which forms the intermediate base. Advantageously, a downwardly directed apron can be formed on this plate which runs around it and matches the contour of the refuse container, or support legs which bear on the lower base can be attached to the plate forming the intermediate base. The insert is preferably fixed to the side walls of the container by means of bonding, welding or suitable fixing elements.

The invention will be described in more detail with reference to the accompanying drawings.

These show:

In Figures 1 and 2, a front and side view of a first embodiment of the container of the invention;

In Figures 3 and 4, a variation;

In Figures 5 and 6, a further variation; and

In Figures 7 and 8, a third variation.

The refuse container 1 shown consists of an essentially rectangular, in particular square housing with four side walls 2, 3, 4 and 5 as well as a lower base 6 and a lid 8 which closes the upper opening and is pivoted about a horizontal axis 7.

5 The inventive refuse container 1 is characterized in that an intermediate base 9 is provided which is spaced from the lower base 6, which restricts the lower end of the container loading or fill space. The lower edge of the front side wall 4 ends in the region of this intermediate base 9, so that an additional space is produced below the actual fill space, which is either open and accessible from the front side (Figures 1 and 2) or, as shown in Figures 3 and 4,
10 into which one or more drawers 10, 11 are pushed.

The housing consisting of the four side walls 2, 3, 4 and 5, the lower base 6 and the intermediate base 9 is preferably manufactured as a one-piece injection moulding.

In the refuse container 21 shown in Figures 5, 6, 7 and 8, consisting of the four side walls 22, 23, 24 and 25, the lower base 26 and the lid 28 which is pivotable about the axis 27, an insert
15 which is supported on the lower base 26 has been inserted into the container, which insert has a plate forming the intermediate base 29 or 30. In Figures 5 and 6, a downwardly directed apron 29.1 which matches the contour of the housing surrounds the plate forming the intermediate base 29, while in the embodiment shown in Figures 7 and 8, support legs 30.1 are formed on the plate forming the intermediate base 30. The inserts 29, 29.1 and 30, 30.1 are fixed to the side walls of
20 the container in an appropriate manner, for example using suitable fixing means, or are bonded or welded thereto.

Each refuse container 1 or 21 is provided with a set of wheels 12 or 31 in the usual manner.

CLAIMS

1. A waste and refuse collecting container with a housing formed by four side walls which is essentially rectangular in horizontal section, in particular square, with a base attached to the underside thereof and with a lid on the top of the container which is pivotable about a horizontal axis, characterized in that it has a second intermediate base (9; 29; 30) which is spaced from the lower base (6; 26), which restricts the lower end of the container loading space.
2. A waste and refuse collecting container according to claim 1, characterized in that the lower edge of one side wall (4) ends in the region of the intermediate base (9).
3. A waste and refuse collecting container according to claim 2, characterized in that the housing, consisting of the side walls (2, 3, 4 and 5), the lower base (6) and the intermediate base (9), is formed as a one-piece injection moulding.
4. A waste and refuse collecting container according to claim 2 or claim 3, characterized in that at least one removable drawer (10 or 11) which can be removed from the container is arranged in the space beneath the intermediate base (9).
5. A waste and refuse collecting container according to claim 4, characterized by guide elements for each drawer (10 or 11).
6. A waste and refuse collecting container according to claim 1, characterized in that an insert is inserted in the housing which is supported on the lower base (26) and which has a plate forming the intermediate base (29; 30).
7. A waste and refuse collecting container according to claim 6, characterized in that a downwardly directed apron (29.1) is formed on the plate forming the intermediate base (29) which runs around the contour of the housing and matches it.
8. A waste and refuse collecting container according to claim 6, characterized in that support legs (30.1) are attached to the plate forming the intermediate base (30).

9. A refuse container according to claim 6, characterized in that the insert (29, 29.1; 30, 30.1) is fixed to the walls of the housing.